09/529, 873.

JUL 2 8 2006 W

CFC

TRANSMITTAL LETTER Docket No. C0003/7023

Applicant:

Holmes

Patent No: Issued:

7,049,010 B1 May 26, 2006

For:

POLYMERIC MATERIALS FOR ELCTROLUMINESCENT DEVICES

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Certificate

JUL 3 1 2006

of Correction

#### **Enclosures**

	Affidavit under 37 C.F.R. 1.131		Request for Corrected Filing Receipt
	Assignment Papers		Copy of Original Filing Receipt
	Change of Correspondence Address		Request for Continued Examination
	Declaration/Power of Attorney		Request for Reconsideration
	Extension of Time Request		Request for Refund
	Fee Transmittal Form		Response to Missing Parts
	Invention Disclosure Document	$\boxtimes$	Return Receipt Postcard
	Notice of Appeal		Sheets Formal Drawing(s)
	Petition for	$\boxtimes$	Two (2) copies of PTO Form 1050
	Power of Attorney Form	$\boxtimes$	Copy of Notice of Allowability
$\boxtimes$	Second Request for Certificate of	$\boxtimes$	Copy of Amendment mailed
	Correction		10/22/2004 with postcard receipt

Therese A. Hendricks, Esq., Reg. No. 30,389

KUDIRKA & JOBSE, LLP Customer Number 021127

Tel: (617) 367-4600 Fax: (617) 367-4656

Date:

Transmittal Letter – General 1of 1

# UNITED STATES PATENT AND TRADEMARK OFFICE **CERTIFICATE OF CORRECTION**

PATENT NO

:7,049,010

DATED

:May 23, 2006

INVENTOR(S)

:Holmes et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

At col. 14 line 56, the third line of claim 4 should read:

unit is attached to its substituent via a hetero atom, selected

At col. 16 line 20, the sixteenth line of claim 22 should read:

which it is attached, 1-10 carbon atoms and 0 or 1-6

MAILING ADDRESS OF SENDER: KUDIRKA & JOBSE, LLP One State Street

Boston, MA 02109

PATENT NO.

7,049,010

No. of additional copies

# UNITED STATES PATENT AND TRADEMARK OFFICE **CERTIFICATE OF CORRECTION**

PATENT NO

:7,049,010

DATED

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:Holmes et al.

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MAILING ADDRESS OF SENDER: KUDIRKA & JOBSE, LLP One State Street

Boston, MA 02109

PATENT NO.

7,049,010

No. of additional copies

JUL 2 8 2006

# SECOND REQUEST FOR CERTIFICATE OF CORRECTION

Docket No. C0003/7023

Killings

Applicant: Patent No:

Holmes et al. 7,049,010 B1

Issued:

May 23, 2006

For:

POLYMERIC MATERIALS FOR ELECTROLUMINESCENT DEVICES

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Commissioner of Patents, U.S. Patent and Trademark Office, P.O. Box 1450,

Alexandria, VA 22313-1450 on 7/25/2006.

This second Request for Certificate of Correction is being filed in response to a communication from the Patent Office mailed June 19, 2006 (copy enclosed). In support of Applicant's request, the following documentation is submitted herewith:

- copy of Amendment mailed October 22, 2004 (and PTO stamped postcard receipt) in which application claims 5 and 31 (which became patent claims 4 and 22) were presented in the correct form as requested herewith; i.e.,
  - a. in application claim 5 (patent claim 4) "unit" is spelled correctly (not "uni")
  - b. in application claim 31 (patent claim 22) "1-6" (not "16") is recited; and
- copy of Notice of Allowability mailed November 12, 2004 in which application claims 5 and 31 were found allowable.

Pursuant to 37 C.F.R. §1.20(a), Applicant respectfully requests the issuance of a Certificate of Correction. Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves 1 page.

The mistakes identified in the appended form are typographical and were made by the Patent Office. No fee is due.

Respectfully submitted,

Date: July 25, 2006

Therese A. Hendricks, Esq., Reg. No. 30,389

KUDIRKA & JOBSE, LLP Customer Number 021127

Tel: (617) 367-4600 Fax: (617) 367-4656



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
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# NOTICE OF ALLOWANCE AND FEE(S) DUE

11/12/2004

EXAMINER
TRUONG, DUC

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER

LLP 1300 I STREET, NW WASHINGTON, DC 20005 TRUONG, DUC

ART UNIT PAPER NUMBER

1711

DATE MAILED: 11/12/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/529 873	07/27/2000	ANDREW BRUCE HOLMES	C1043/7023	3741	

TITLE OF INVENTION: POLYMERIC MATERIALS FOR ELECTROLUMINESCENT DEVICES

APPLN. TYPE	. TYPE SMALL ENTITY ISSUE F		PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370	\$0	\$1370	02/14/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

JUI	his form, nogether with 2 8 2006	th applicable f	or <u>Fax</u>	Mail Stop ISSUI Commissioner for P.O. Box 1450 Alexandria, Virg (703) 746-4000	or Patents ginia 22313-1450	
appropriate. All further con indicated unless corrected maintenance fee notification	respanding the below or directed otherwise	smitting the ISSU Patent, advance or in Block 1, by (a	THE FEE and PUBIT ders and notification of the specifying a new	LICATION FEE (if requestion of maintenance fees correspondence address	nired). Blocks 1 through 5 s will be mailed to the current ; and/or (b) indicating a sepa	hould be completed when correspondence address a arate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  22852 7590 11/12/2004  FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  LLP  1300 I STREET, NW  WASHINGTON, DC 20005			Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.  Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the Unite States Postal Service with sufficient postage for first class mail in an envelop addressed to the Mail Stop ISSUE FEE address above, or being facsimit transmitted to the USPTO (703) 746-4000, on the date indicated below.  (Depositor's name)			
W11511111G1G11, 1	JC 20003					(Signature
						(Date
APPLICATION NO.	FILING DATE	<u> </u>	FIRST NAMED INV	ENTOP	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,873	07/27/2000				<u> </u>	
TITLE OF INVENTION: PO			NDREW BRUCE I		C1043/7023	3741
TITLE OF INVENTION. FO	OLIMERIC MATERIALS	FOR ELECTROL	JMINESCENT DE	VICES	•	e - 1
					,	
APPLN. TYPE	SMALL ENTITY	ISSUE FI	FF	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370		\$0	·	
nonprovisional	NO	\$1370		20	\$1370	02/14/2005
EXAM	INER	ART UN	IT	CLASS-SUBCLASS	]	
TRUON	G, DUC	1711		428-690000		
CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form  (1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or agents OR.				single firm (having as a member a y or agent) and the names of up to tattorneys or agents. If no name is		
3. ASSIGNEE NAME AND			_			
PLEASE NOTE: Unless recordation as set forth in	an assignee is identified be 37 CFR 3.11. Completion	clow, no assignee of of this form is NOT	data will appear or Γa substitute for fil	the patent. If an assigning an assignment.	nee is identified below, the d	ocument has been filed for
(A) NAME OF ASSIGNI				ITY and STATE OR CO		
4a. The following fee(s) are		ries (will not be pri 4b	nted on the patent) Payment of Fee(s)	: Individual I C	orporation or other private gr	oup entity
Issue Fee			_	amount of the fee(s) is en		•
Publication Fee (No small entity discount permitted)  Payment by credit card. Form PTO-2038 is attached.  Advance Order - # of Copies				credit any overnovment t		
			Deposit Account N	lumber	(enclose an extra c	opy of this form).
5. Change in Entity Status (  a. Applicant claims SM	(from status indicated above MALL ENTITY status. See 3	•	☐ b. Applicant is	no longer claiming SMA	LL ENTITY status. See 37 C	FR 1.27(g)(2).
The Director of the USPTO i NOTE: The Issue Fee and Pu interest as shown by the reco	s requested to apply the Issu ablication Fee (if required) we rds of the United States Pate	te Fee and Publicat vill not be accepted ant and Trademark	ion Fee (if any) or to from anyone other Office.	to re-apply any previously than the applicant; a reg	y paid issue fee to the applica istered attorney or agent; or the	tion identified above. ne assignee or other party i
Authorized Signature		·		Date		
Typed or printed name			Registration No.			
This collection of information an application. Confidentialit submitting the completed appthis form and/or suggestions Box 1450, Alexandria, Virgin Alexandria, Virginia 22313-1	n is required by 37 CFR 1.3 by is governed by 35 U.S.C. plication form to the USPT( for reducing this burden, sh nia 22313-1450. DO NOT S 450.	11. The information 122 and 37 CFR 1 D. Time will vary ould be sent to the SEND FEES OR C	n is required to obta .14. This collection depending upon the Chief Information OMPLETED FOR	uin or retain a benefit by the is estimated to take 12 and individual case. Any conficer, U.S. Patent and MS TO THIS ADDRESS	the public which is to file (and minutes to complete, including mments on the amount of tin Trademark Office, U.S. Depis S. SEND TO: Commissioner	by the USPTO to process g gathering, preparing, an ne you require to complet artment of Commerce, P.O. for Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 11/04) Approved for use through 04/30/2007.

OIPE MA		
JUL 2 8 2006 W	Application No.	Applicant(s)
· \g \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	09/529,873	HOLMES ET AL.
Notice of Allowability	Examiner	Art Unit
MADE	Duc Truong	1711
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Right of the Office or upon petition by the applicant. See 37 CFR 1.313	OR REMAINS) CLOSED or other appropriate comr GHTS. This application is	in this application. If not included munication will be mailed in due course. THIS
2. X The allowed claim(s) is/are 1,3-5,7,9,11-24,30-32 and 35-3	0	
	<del>-</del>	
3. ☑ The drawings filed on <u>27 July 2000</u> are accepted by the Exa	aminer.	
4.  Acknowledgment is made of a daim for foreign priority unit a)  All b)  Some* c)  None of the:  1.  Certified copies of the priority documents have 2.  Certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have 4.  Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5.  A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 6.  CORRECTED DRAWINGS (as "replacement sheets") must (a)  including changes required by the Notice of Draftspersor 1)  hereto or 2)  to Paper No./Mail Date  (b)  including changes required by the attached Examiner's Paper No./Mail Date  Identifying Indicia such as the application number (see 37 CFR 1.8 each sheet. Replacement sheet(s) should be labeled as such in the paper No./Mail Date  DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F	been received. been received in Applicate the process of this communication to find the communication to find the communication to find the communication.  Ited. Note the attached Expression of the communication.  Ited. Note the attached Expression of the content of the content of the content of the communication of the co	tion No  red in this national stage application from the requirements  XAMINER'S AMENDMENT or NOTICE OF or declaration is deficient.  ew ( PTO-948) attached  or in the Office action of  the drawings in the front (not the back) of CFR 1.121(d).  TERIAL must be submitted. Note the
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Paper No 7. ☐ Examiner	Informal Patent Application (PTO-152) Summary (PTO-413), b./Mail Date s Amendment/Comment s Statement of Reasons for Allowance

Application/Control Number: 09/529,873

Art Unit: 1711

# **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

Claims 1, 3-5, 7, 9, 11-24, 30-32, and 35-39 are allowable over the prior art because none of the prior art documents discloses specific adjacent substituents of a film-forming conjugated poly(1,4-arylene vinylene) compound having a 1,4-phenylene unit, in that said adjacent substituents being oriented such as to affect the electronic structure of the compound sufficiently to cause a blue-shift in the photoluminescence and/or electroluminescence of the compound, in the claimed compound/ method of making said compound and devices using said compound.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 571-272-1081. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number: 09/529,873

Art Unit: 1711

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUCTRUONG PRIMARY EXAMINER

\*\*\*

## PLEASE STAMP TO ACKNOWLEDGE RECEIPT OF THE FOLLOWING:

In Re Application of: Holmes et al.

Application No.: 09/529,873

Group Art Unit: 1711

Filed: July 27, 2000

Examiner: D. Truong

For: POLYMERIC MATERIALS FOR ELECTROLUMINESCENT DEVICES

1. Request for Continued Examination (1 page),

2. Amendment and RCE Submission Under 37 C.F.R. § 1.114 (11 pages),

3. Check in the amount of \$790.00.

Dated October 22, 2004

Docket No.: 08513.7023-00000

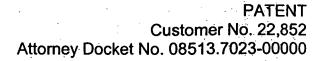
(Due Date:N/A)

OCT 2 2 20

TAH/MTB/jml - Please return postcard to J. Leveille Mail Drop CAMB.



OKA " "





#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

**HOLMES** et al.

Application No.: 09/529,873

Filed: July 27, 2000

For: POLYMERIC MATERIALS FOR

**ELECTROLUMINESCENT** 

**DEVICES** 

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Group Art Unit: 1711

Examiner: D. Truong



# AMENDMENT AND RCE SUBMISSION UNDER 37 C.F.R § 1.114

Pursuant to the Appeal Brief filed July 23, 2004, and the Request for Continued Examination filed concurrently herewith, Applicants respectfully request reconsideration of this application in view of the following amendments and remarks.

Amendments to the Claims are reflected in the listing of claims in this paper.

# **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A compound comprising a soluble, film-forming conjugated poly(1,4-arylene vinylene) compound having a 1,4-phenylene vinylene unit with adjacent substituents, said substituents being oriented such as to affect the electronic structure of the compound sufficiently to cause a blue-shift in the photoluminescence and/or electroluminescence of the compound, wherein the substituents are independently selected from:

# (i) R-, RO-, RS-, and RR'N-

wherein R and R' are independently: a straight or branched chain alkyl group,
alkenyl group, or alkynyl group having 1-10 carbon atoms; or an aromatic or nonaromatic heterocyclic group; and

- (ii) a group in which the adjacent substituents together form a cyclic group, the cyclic group containing, in addition to the two carbon atoms of the arylene unit to which it is attached, 1-10 carbon atoms and 0 or 1-6 hetero atoms selected from 0, S and N.
  - 2. (canceled).

- 3. (currently amended) A compound according to claim [[2]] 1, wherein the cyclic group contains 2-6 hetero atoms.
- 4. (previously presented) A compound according to claim 1, wherein one or both of the adjacent substituents are independently selected from a branched alkyl group and a branched alkoxy group.
- 5. (previously presented) A compound according to claim 1, wherein each of the carbon atoms at the adjacent substituted positions of the aryl unit is attached to its substituent via a hetero atom, selected from 0, S or N.
  - 6. (canceled).
- 7. (previously presented) A compound according to claim 1, wherein one or both of the adjacent substituents are independently selected from butyloxy, ethylhexyloxy and 3',7'-dimethyloctyloxy groups.
  - 8. (canceled).
- 9. (previously presented) A compound according to claim 1, wherein the poly(arylene vinylene) is a co-polymer comprising a fluorescent unit carrying a distyryl-2,3-substituted-benzene fragment.
  - 10. (canceled).

- 11. (previously presented) A compound according to claim 1, wherein the adjacent substituents are in the 2-position and the 3-position of the phenylene residue.
  - 12. (previously presented) A compound according to claim 11, of formula (I):

wherein Sub is a substituent as defined in claim 1, the vinylene unit may be a trans vinylene unit or a cis vinylene unit, and n is the number of units of the formula in the polymer.

13. (original) A compound according to claim 11, of formula (II) or formula (III):

wherein the vinylene unit may be a trans vinylene unit or a cis vinylene unit, and n is the number of units of the respective formula in the polymer.

- 14. (previously presented) A method for the production of a compound as defined in claim 1, which method comprises polymerising a bis(halomethyl) substituted phenyl monomer in the presence of a base to form a poly(arylene vinylene), wherein the phenyl monomer has adjacent substituents on the phenyl residue.
- 15. (original) A method according to claim 14, wherein the monomer is a bis(chloromethyl), bis(bromomethyl) or bis(iodomethyl) monomer.
- 16. (previously presented) A method according to claim 14, wherein the base is potassium tertiary butoxide.
- 17. (previously presented) A component or device comprising a compound as defined in claim 1.

- 18. (previously presented) A component or device according to claim 17, further comprising an electric, electronic, optical or optoelectronic component or device.
- 19. (previously presented) A component or device according to claim 17, further comprising a photoluminescent or electroluminescent component or device.
- 20. (previously presented) A light emitting diode comprising a component or device as defined in claim 17.
- 21. (previously presented) A method for producing a component or device, which method comprises coating a solution of a compound as defined in claim 1 onto a substrate to form a film.
  - 22. (original) A method according to claim 21, wherein the substrate is ITO.
- 23. (previously presented) A method according to claim 21, wherein the solution is a chloroform solution.
- 24. (previously presented) A method according to claim 21, wherein the solution is spin-coated onto the substrate.
  - 25-29. (canceled).
- 30. (original) A light emitting diode having a coating of a compound according to claim 1.
- 31. (currently amended) An electric, electronic, optical or optoelectronic component or device having a coating comprising a soluble, film-forming conjugated poly(1,4-arylene vinylene) compound having a 1,4-phenylene vinylene unit with

adjacent substituents which produces blue-shifted electroluminescence or photoluminescence, wherein the substituents are independently selected from:

# (i) R-, RO-, RS-, and RR'N-

wherein R and R' are independently: a straight or branched chain alkyl group, alkenyl group, or alkynyl group having 1-10 carbon atoms; or an aromatic or non-aromatic heterocyclic group; and

- (ii) a group in which the adjacent substituents together form a cyclic group, the cyclic group containing, in addition to the two carbon atoms of the arylene unit to which it is attached, 1-10 carbon atoms and 0 or 1-6 hetero atoms selected from 0, S and N.
- 32. (currently amended) A compound comprising a soluble, film-forming conjugated poly(phenylene vinylene) compound having a 1,4-phenylene vinylene unit with adjacent substituents, said substituents being oriented such as to affect the electronic structure of the compound sufficiently to cause a blue-shift in the photoluminescence and/or electroluminescence of the compound, wherein the adjacent substituents are in the 2-position and the 3-position of the phenylene residue, wherein the compound is of formula (II) or formula (III):

wherein the vinylene unit may be a trans vinylene unit or a cis vinylene unit, and n is the number of units of the respective formula in the polymer.

# 33-34. (canceled).

- 35. (previously presented) A compound comprising a film-forming conjugated poly(1,4-arylene vinylene) compound, said poly(1,4-arylene vinylene) compound being soluble in organic solvents and having a 1,4-phenylene vinylene unit with adjacent substituents, said substituents being oriented such as to affect the electronic structure of the compound sufficiently to cause a blue-shift in the photoluminescence and/or electroluminescence of the compound.
- 36. (previously presented) An electric, electronic, optical or optoelectronic component or device having a coating comprising a film-forming conjugated poly(1,4-arylene vinylene) compound, said poly(1,4-arylene vinylene) compound being soluble in

organic solvents and having a 1,4-phenylene vinylene unit with adjacent substitutents which produces blue-shifted electroluminescence or photoluminescence.

- 37. (currently amended) A process for directly obtaining a soluble, film-forming conjugated poly(1,4-arylene vinylene) compound having a 1,4-phenylene vinylene unit with adjacent substituents, said substituents being oriented such as to affect the electronic structure of the compound sufficiently to cause a blue-shift in the photoluminescence and/or electroluminescence of the compound, said process comprising a step of dehydrohalogenation condensation polymerisation comprising subjecting a solution comprising 2,3 disubstituted bishalomethylbenzene monomers to polymerisation with at least two equivalents of base.
- 38. (currently amended) A compound comprising a soluble, film-forming conjugated poly(1,4-arylene vinylene) compound having solubilising groups so as to render the conjugated poly(1,4-arylene vinylene) compound soluble in organic solvents, the compound having a 1,4-phenylene vinylene unit with adjacent substituents, said substituents being oriented such as to affect the electronic structure of the compound sufficiently to cause a blue-sift in the photoluminescence and/or electroluminescence of the compound.
- 39. (currently amended) An electric, electronic, optical or optoelectronic component or device having a coating comprising a film-forming conjugated poly(1,4-arylene vinylene) compound having solubilising-groups so as to render the conjugated

Application No. 09/529,873 Attorney Docket No. 08513.7023-00000

poly(1,4-arylene vinylene) compound soluble in organic solvents and having a 1,4-phenylene vinylene unit with adjacent substituents which produces blue-shifted electroluminescence or photoluminescence.

Application No. 09/529,873 Attorney Docket No. 08513.7023-00000

### **REMARKS**

Claims 1-7, 9, 11-24 and 30-39 were pending in this application. Claims 1, 3, 31, 32, and 37-39 have been amended. Claims 2, 6, 33, and 34 have been cancelled. Claims 1, 3-5, 7, 9, 11-24, 30-32, and 35-39 remain in the application.

Applicants wish to thank the Examiner for the courtesy of telephonic interviews on September 16, 2004, and October 19, 2004, to discuss the claim amendments.

Claim 1 has been amended to incorporate the limitations of claim 2 with the exception of R as an aryl group. Claim 31 has been amended similarly. Claim 3 has been amended to change the dependency from claim 2 to claim 1. Accordingly, claim 2 has been cancelled.

Additionally, claims 1, 31, 32, 37 and 38 have been amended to delete "soluble." Claims 38 and 39 have been amended to delete "solubilising."

Accordingly, no new matter has been added by the amendments. Applicants respectfully submit that the claims are now in condition for allowance.

Please grant any extensions of time required to enter this paper and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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